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ABSTRACT

Feedback is discussed in relation to measuring the change process, a three-step procedure of dialogue, decision-making, and action-taking. Measurement problems resulting from feedback are presented. (AG)

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FEEDBACK AND THE MEASUREMENT OF CHANGE

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FEEDBACK AND THE MEASUREMENT OF CHANGE

It is customary to examine change from a substantive perspective, looking (for example) at the effects of forced desegregation, the effectiveness of team teaching, or the consequences of various curriculum or administrative alterations. It seems equally reasonable, however, to focus attention not on any particular change but on the process of change itself. That is the perspective in which the research on the League of Cooperating Schools is taking place; and I would like to suggest how the use of feedback in that context (with its emphasis on the League and on the process of change) creates some very special problems for the researcher.

Our assumption was that schools would be able to respond most effectively if they had incorporated a process of change into their institutional system. That process was conceived to be a three-step procedure of dialogue, decision-making, and action-taking (DDA)--each of these being, in turn, measurable along various dimensions (e.g. their flexibility, consistency, the degree of consensus involved, etc.). The details regarding this measurement scheme are not vital here. The point is that given this interest in process, what feedback as a technique of social intervention does (especially in a League context) is to intensify many of the standard methodological problems in research. How so?

(1) To the extent that feedback emphasizes the importance of the DDA process, and implicitly praises or criticizes the level of DDA in a given school, it becomes difficult in subsequent measurements to discriminate "test-wise"

responses from "real-change". Knowledge of results in itself affects later measurements. But beyond that, enlisting the subject in the research enterprise involves teaching him what the "correct" response is--in this case, teaching him something of the presumed significance of the DDA process and developing a "DDA orientation". The standard methodological problem in most research is to keep the respondent ignorant of what is at stake, even to deceive him where necessary for the sake of the experiment. Our feedback intensifies that problem by a "show-and-tell" approach which may be ethically more elegant but makes researchable propositions infinitely more difficult to demonstrate.

(2) A common answer to the problem of subject awareness is to develop multiple and equivalent measures of the variable being reviewed. Thus, where feedback teaches the right verbal response, one would search for alternative non-verbal indices--what Webb, et al[1] have called "unobtrusive" (essentially non-reactive) measures. However, two problems emerge:

(a) Since the emphasis is upon the change process, it becomes exceedingly difficult to find unobtrusive measures--more difficult, in any event, than it might be if the criterion variable were a substantive rather than a processual one. Measures of process are notoriously elusive: the difference between measuring an achievement score and measuring the teaching process that produced it nicely illustrates the problem. We have tried to get data from various sources--from the teachers' descriptions (via questionnaires) of the process that was involved in a particular school change; from the documents of designated reporters (at each school) detailing, month-by-month, the events

relevant to DDA in their schools; from interviews with teachers in each school; and from observations at staff meetings in each school. But it remains true that unobtrusive measures of dialogue, decision, and action are hard to come by.

(b) To complicate the matter further, our feedback strategy aims at thoroughgoing change, involving commitment to a very basic process in the schools. If the understanding we convey is thoroughgoing, the researcher will have no better comprehension of this change process than the teaching staff does. To the degree that this is so (and in a sense the aim of feedback is to help make it so) there are no unobtrusive measures--i. e. staff members can create and recognize such measures as well as the researcher can. If that situation is realized through feedback, it could be a desirable realization of educational goals but a considerable problem for the research objectives.

(3) Customary research practice seeks to insulate one test group from another (e.g. in the laboratory, warning against discussing the experiment with others). In the League, external communication is built into the conception of the change process. The information fed back is supposed to be communicated beyond the boundaries of the given school. The League serves both as a channel of communication of ideas and as a source of mutual support for efforts at innovation. Whatever the desirable educational goals that may be served by this arrangement, it raises problems for the research in assessing what effect any given feedback experience has had upon the school.

(4) Feedback also introduces a calculated and probably powerful source of unreliability. It does so by providing the teachers with new standards of

reference concerning what is high, low, or average standing on various measures of dialogue, decision, and action. Re-measurement after feedback is likely to show the effects of this new awareness: e.g. what was once thought to be "very much" dialogue may be rated as only "average". In effect, the measuring device is "rubberized" by the implicit shifting of standards for judgment.

To conclude, I wish I could offer solutions to these problems, but such solutions are not so readily found. The general approach is nicely described in Kidder and Campbell's suggestion that:

> "Rather than speak of 'subjects' who must be coerced or cajoled into cooperating and whose defenses must be overcome, we might return to the view of the German psychologists who treated their respondents as Versuchspersonen, or fellows in research"[2]

Perhaps the basic solution is also a very general one: The full awareness that bringing the research subject into the investigative process, through feedback or other procedures, presents both opportunity and a formidable research challenge.

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1. Webb, E. J., D. T. Campbell, R. D. Schwartz, and L. Sechrest: Unobtrusive Measures: Nonreactive Research in the Social Sciences, Rand McNally & Co., Chicago, Illinois, 1966.

2. Kidder, L. H. and D. T. Campbell: "The Indirect Testing of Social Attitudes", (p. 375). In: Summers, G. F. (ed.), Attitude Measurement, Rand McNally & Co., Chicago, Illinois, 1970.